UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,371	09/18/2003	Hee Kyung Lee	51876P389	8435
	7590 12/11/200 KOLOFF TAYLOR &		EXAMINER	
1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040			LUONG, ALAN H	
SUININI VALE,	CA 94003-4040	ART UNIT		PAPER NUMBER
			2427	
			MAIL DATE	DELIVERY MODE
			12/11/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/666,371	LEE ET AL.				
Office Action Summary	Examiner	Art Unit				
	ALAN LUONG	2427				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence ad	ldress			
A SHORTENED STATUTORY PERIOD FOR REPL' WHICHEVER IS LONGER, FROM THE MAILING D. Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONEI	J. nely filed the mailing date of this or D (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>08 S</u>	eptember 2008.					
	action is non-final.					
3) Since this application is in condition for allowar						
closed in accordance with the practice under E						
Disposition of Claims						
4)⊠ Claim(s) <u>1-30</u> is/are pending in the application						
· · · · · · · · · · · · · · · · · · ·						
5) Claim(s) is/are allowed.	4a) Of the above claim(s) is/are withdrawn from consideration.					
6)⊠ Claim(s) <u>1-30</u> is/are rejected.						
7) Claim(s) is/are objected to.	•					
8) Claim(s) are subject to restriction and/o	r election requirement.					
	·					
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the			ED 4 404/4)			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
,	anniler. Note the attached Office	ACTION OF IOTHER I	10-132.			
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document * See the attached detailed Office action for a list 	s have been received. s have been received in Application rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National	Stage			
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	nte				

DETAILED ACTION

The art unit is changed into 2427.

Response to Amendment

This Office Action is responsive to the Amendment filed on 09/08/2008.

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-3, 6-7, 10-12, 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No.7,055167 issued to Masters (hereinafter Master); in view of WO 00/40021 to Edwin Montie et al. (hereinafter Montie).

Regarding to claim 1: Fig. 3 of Master illustrates a system [1] support "a personal channel service providing method for outputting a television (TV) program preferred by a user, which is referred to as a preferred program, through a personal channel of a personal digital recorder (PDR) [4] beginning at a time preferred by the user, which is referred to as a preferred duration, the method comprising the steps of:

Application/Control Number: 10/666,371

Art Unit: 2427

(a) a PVR [4] "receives content description data" at connection (14a of Fig. 3) of a program to be broadcasted" from broadcast source [2] as "a TV network "and responses "instance description data" at connection (14b of Fig. 3) of a program to the broadcast source [2]. (see Master, Fig. 1, 3 col. 2, line 53 to col. 3, line 13 and col. 6 lines 9-23).

Page 3

(b) Fig. 4 of Master illustrates the viewing menu 40 on display [6] that "determines the preferred duration and the preferred program in the preferred duration" into submenu [44]" based on usage history of the PDR" [4] (see Master, Fig. 4, col. 7 line 44 to col. 8 line 30) and Fig. 2 of Master shows the procedure selectively updates the viewing menu 40 upon viewer input on the predetermined day of the week to provide for a history of broadcast programs the viewer actually selected on the predetermined day of the week that meets "updating the instance description data to include the preferred duration and the preferred program" (see Master, steps 210-214 of Fig. 2 col. 5 lines 12-26). However, Master reference is silent with "generating an electronic program guide for informing the user that the preferred program is outputted on the personal channel at the preferred duration based on the updated instance description data"

In an analogous art directed toward a similar problem namely improving the results from generating an electronic program guide. Fig. 1 of Montie illustrates a receiver apparatus includes EPG module [14] generates an on-screen overview programs stored in the memory [11] can be accessed by a virtual channel module [15] for creating the virtual channel based on a personal program schedule that is composed

by the schedule module [16] that meets "generating an electronic program guide for informing the user that the preferred program is outputted on the personal channel at the preferred duration based on the updated instance description data" (see Montie, page 4, line 10-page 6 line 18). At the time of the invention, it would have been obvious to a person having ordinary skill in the art to modify the PDR with personal channel service of Master including EPG module as taught by Montie to generate EPG information for supporting channel information.

Regarding to claim 2. Masters disclose the method as recited in claim 1; also discloses wherein the step b) includes the steps of:

e) selecting the preferred duration, such as day and time(TUESDAY, 10PM), genre preferred in the preferred duration, which is referred to as a preferred genre (CH7 FRASIER) and a predetermined number of preferred program titles (CH 11 NEWS) based on the usage history of the PDR (as discussion in claim 1-b), and generating user preference data (view menu 40) to include the preferred duration (Submenu 42: Day/Segment), the preferred genre (submenu 44: category name or genre), and the preferred program titles (submenu 44:channel 2 news); (Master, see Fig.4 col. 7 line 44 to col. 8 line 49)

f) if the preferred duration is for watching a program stored in the PDR (col. 8, lines 31-38), extracting group information of a program title that belong to the preferred genre among the preferred program titles based on the content description data (Master, col. 8, lines 50-58 and Fig.4); and

g) determining a program following a most recently watched program among the programs that belong to the group as the preferred program in the preferred duration; see Master, col. 8 line 50 to col. 9 line 13)

Page 5

Regarding to **claim 3**: Masters discloses the method as recited in claim 2, wherein the preferred duration, such as day and time, is selected based on total duration of programs outputted by the PDR in particular time duration. (Limitation of claim 1 of **Master**, **col. 9 lines 15-32**).

Regarding to **claim 6**: Masters discloses the method as recited in claim 1; further discloses wherein the step b) includes the steps of:

- h) selecting the preferred duration, such as day and time, preferred genre in the preferred duration, and a predetermined number of preferred program titles based on the usage history of the PDR (see claim 1 discussion), and generating user preference data to include the preferred duration, the preferred genre, and the preferred program titles; (same ground rejection of claim 2-e)
- i) if the preferred duration is for watching a program broadcasted in real-time (Master, col. 8 lines 38-49), extracting a list of real-time broadcasting programs from the instance description data (Col. 8 lines 50-58); and
- j) determining a program that belongs to the preferred genre among the programs on the list as the preferred program in the preferred duration. (Same ground rejection of claim 2-g).

Regarding to **claim 7**: same claim 3 ground rejection.

Regarding to claim 10: Master discloses a personal channel service providing apparatus (PDR 4 of Fig. 1, 3; col. 2 lines 30-46) for outputting a TV program preferred by a user, which is referred to as a preferred program, through a personal channel beginning at a time preferred by the user, which is referred to as a preferred duration, the apparatus [4] comprises: " a memory portion" management module [8] is implemented in connection with a central processor "for storing a control program" to control PVR [4]; (see Master, Figs.1, 3; col. 6 lines 44-61), "a database" storage[10] "stores instance description data, usage history of the personal channel service providing apparatus"; (col. 6 line 62 to col.7 line 17) and "a display portion" [6] is connected with display generator [18] inside PDR[4] by [12] "for outputting an EPG" information [26] from management module [8]; (Master, Fig. 3, col. 5 lines 28-61). However, Master reference is silent with "a processing portion for updating the instance description data based on the user preference data and generating an EPG which informs the user that the preferred program is outputted through the personal channel at the preferred duration based on the updated instance description data, the processing portion being connected to the memory portion, the database, and the display portion"

In an analogous art directed toward a similar problem namely improving the results from the apparatus includes a processing portion is connected to the memory portion, the database, and the display portion for updating the instance description data. Fig. 1 of Montie illustrates "a processing portion" includes a [CPU 5] being connected to the memory portion [ROM 12], the database [11] and the display portion [8 and 9] (see

Montie, page 4, line 10-page 5 line 14); and the processing portion also includes the schedule module [16] composes a personal program schedule for a virtual channel comprising recorded programs and/or broadcast program meets "for updating the instance description data based on the user preference data" (see Montie, page 5, line 26-page 6 line 18) and the EPG module [14] is "generating an EPG which informs the user that the preferred program is outputted through the personal channel [virtual channel] at the preferred duration" is scheduled by [16]" based on the updated instance description data" (see Montie, page 5, lines 15-25). At the time of the invention, it would have been obvious to one with ordinary skill in the art to modify the PDR for personal channel service of Master with a processing portion as taught by Montie; for updating and generating EPG which informs the user that the preferred program is outputted through the personal channel at the preferred duration based on the updated instance description data.

Regarding to **claim 11:** same claim 2 ground rejection.

Regarding to **claim 12**: same claim 3 ground rejection.

Regarding to claim 15: same claim 6 ground rejection.

Regarding to **claim 16:** same claim 7 ground rejection.

3. Claims 4-5, 8-9, 13-14 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No.7,055167 (US'167) issued to Masters and Montie; in view of US Patent No. 7,212,730 (Hereinafter US'730) issued to Boston et al.

Application/Control Number: 10/666,371 Page 8

Art Unit: 2427

Regarding to claim 4: Masters discloses the method as recited in claim 2; but fails to teach wherein a genre of a program that occupies the longest duration among the programs.

In an analogous art directed toward a similar problem namely improving the results from a genre of a program. Boston, the same field endeavor, teaches wherein a genre of a program that occupies the longest duration among the programs outputted by the PDR in the preferred duration is selected as the preferred genre. (Genre field 430 is used to identify the types of programs the user enjoys watching; (see col. 6 lines 20-38); and Metadata 540 maintained for the program may include the program title 550, the length of program 565, the genre of the program 580. The metadata is searchable by the DVR in selecting a program that based on the user's preferences; that user is likely to enjoy watching; (see Boston, col. 6 lines 44-54 and Fig. 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify a metadata maintained for the length of a genre program as taught by Boston in the PDR of Masters; in order to create a personal channel based on category's user.

Regarding to **claim 5:** Boston discloses the method as recited in claim 2, wherein the preferred program titles are selected based on the program duration outputted by the PDR, the EPG, and a frequency of program information exposure.

(Boston, Fig.19 col. 16 lines 19-62 and Fig. 25 col. 20 lines 36 to col. 21 line 29).

Regarding to claim 8: same ground rejection of claim 4.

Regarding to claim 9: same ground rejection of claim 5.

Regarding to claim 13: same claim 4 ground rejection.

Regarding to claim 14: same claim 5 ground rejection.

Regarding to claim 17: same claim 8 ground rejection.

Regarding to claim 18: same claim 9 ground rejection.

4. Claims 19-23, 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 7,055,167 issued to Masters (hereinafter Master); in view of US Pub. No. 20030126600 A1 (US'600) to Heuvelman; further in view of PCT/EP99/10058 to Edwin Montie et al. (hereinafter Montie).

Regarding to claim 19. Masters teaches a personal channel service providing method comprising the steps of:

- a) receiving content description data (see Master, col. 3 lines 1-13; Fig. 2 step 200-206; col. 3 line 31-col.4 line47) and instance description data of broadcasting programs (step 208, Fig. 2 col. 4 lines 48-60)
- b) determining a broadcasting program (col. 2 lines 58-67) which is included in the personal channel based on user preference data, the content description data (recorded program is transmitted from service provider (2 of Fig.3), and instance description data (the current watching program at user's EPG (26 of Fig. 3) (see Fig. 3, col. 5 line28 to col. 7 line 43; Fig. 4 col. 7 line 53 to col. 8 line 19);

Application/Control Number: 10/666,371 Page 10

Art Unit: 2427

c) updating the instance description data to include information of the determined broadcasting program (see Master, steps 210-214 of Fig. 2 col. 5 lines 12-26); and

However, Masters fails to teach generating a personal channel; generating an electronic program guide based on the content description data and the updated instance description data.

In an analogous art directed toward a similar problem namely improving the results from generating a personal channel. Heuvelman, the same field endeavor, teaches generating a personal channel (see Heuvelman, ¶0005-¶0009, and ¶0063). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the personal channel service of Masters with a personalized channel generating as taught by Heuvelman in order to increase the user-friendliness and level of user control regarding program selection.

Neither Master nor Heuvelman teaches "generating an electronic program guide based on the content description data and the updated instance description data". In an analogous art directed toward a similar problem namely improving the results from generating an electronic program guide based on the content description data and the updated instance description data. Fig. 1 of Montie illustrates a receiver apparatus includes EPG module [14] generates an on-screen overview programs stored in the memory [11] can be accessed by a virtual channel module [15] for creating the virtual channel based on a personal program schedule that is composed by the schedule module [16] that meets "generating an electronic program guide based on the content

description data and the updated instance description data" (see Montie, page 4, line 10-page 6 line 18). At the time of the invention, it would have been obvious to a person having ordinary skill in the art to modify the PDR with personal channel service of Master including EPG module as taught by Montie to generate EPG information for supporting channel information.

Regarding to claim 20. Masters teaches the user preference data is updated in accordance with user history information (sub menu 42, 44 in view menu 40 of Fig. 4; see Master, col. 8 lines 3-30).

Regarding to claim 21. Masters also teaches the user history information includes information of user action (based on sub menu 42, 44 in view menu 40 of Fig. 4; user can Edit or Execute the viewing menu) when the user reviews the broadcasting program in the EPG. (See Master, col. 8 line 31-col. 9 line 13).

Regarding to claim 22. Masters further teaches the content description data includes program information and group information. (sub menu 44 contains channels and category group; See Master, Fig. 4 col. 8 lines 3- 30).

Regarding to claim 23. Masters teaches the method as recited in claim 19, wherein the instance description data includes program location and service information (see Fig. 3 col. 5 line 28 to col. 7 line 43).

Regarding to claim 24. The method as recited in claim 19, Heuvelman also teaches "wherein the user preference data includes a user's preferred day and time, genre, or title". (see ¶0062-¶0063)

Regarding to claim 25. The scope of claim 25 is substantially the same or slightly broader than of claim 19 since apparatus in claim 25 requires every structural element of claim 19. Thus, claim 25 is also rejected by Master, Heuvelman and Montie for the same reasons provided in the rejection of claim 19.

Regarding to claim 26. Same claim 20 ground rejections.

Regarding to claim 27. Same claim 21 ground rejections.

Regarding to claim 28. Same claim 22 ground rejections.

Regarding to claim 29. Same claim 23 ground rejections.

Regarding to claim 30. Same claim 24 ground rejection.

Response to Arguments

Applicant's arguments filed 09/08/2008 have been fully considered but they are not persuasive.

Applicant argues that: "There is no filtering of the displayed information based on usage history as required by claim 1 or any other mechanism" (Remark, page 11). Examiner respectfully disagrees:

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "There is no filtering of the displayed information based on usage history") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Additionally, Applicant points out that Montie reference does not teach any capability for the user to select a particular program of interest from an EPG containing only a set of programs of interest, i.e., an EPG containing only personal channel programming. While such usage history is arguably provided by Masters, the claims require the generation of a personalized EPG so that the user can select the program desired to be watched from among a set of programs, all of which are of interest to the user based upon the user's usage history. In this connection, neither Masters nor Montie teach or suggest an EPG containing only programs based upon usage history as required by the claims. (Remark, page 11-12).

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Examiner respectfully disagrees in response: Montie discloses EPG module locates inside PVR, collecting data from outsource to generate EPG on-screen overview of programs to be selected by user based on scheduled programs or stored in memory which are selected based on the history usage; (Montie, page 5 lines 15-25). While such usage history is arguably provided by Masters in (Fig. 4, col. 8 lines 5-30) is modified with EPG generating method as taught by Montie. Therefore, it is the examiner's opinion that the combination of Masters and Montie meets all limitation of "an EPG containing only programs based upon usage history as required by the claims".

It is respectfully submitted that a prima facie case of obviousness has in fact been established and the rejection should be sustained.

Therefore, after a careful consideration of the arguments presented, the Examiner must respectfully disagree for the reasons that follow, maintain the grounds of rejection with the same references.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALAN LUONG whose telephone number is (571)270-5091. The examiner can normally be reached on Mon.-Thurs., 8:00am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Beliveau can be reached on (571) 272-7343. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/666,371 Page 15

Art Unit: 2427

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ALAN LUONG/ Examiner, Art Unit 2427

/Scott Beliveau/

Supervisory Patent Examiner, Art Unit 2427